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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,402	11/19/2003	Yong-Hyun Lee	1349.1330	5308
21171	7590	03/06/2006	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			NICHOLSON III, LESLIE AUGUST	
			ART UNIT	PAPER NUMBER
			3651	

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/715,402	Applicant(s) LEE ET AL.	
	Examiner Leslie A. Nicholson III	Art Unit 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 6-21,27,30-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,24-26,28,29 is/are rejected.
- 7) ☒ Claim(s) 2-5,22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/19/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments and Amendments

1. Due to amendment and/or further explanation by Applicant, all objections and 35 USC 112 2nd paragraph rejections are hereby withdrawn.

Applicant's arguments for all claim rejections have been fully considered.

Regarding Applicant's arguments of rejections of claims 1 under 35 USC 102(a) as being anticipated by Hsu USPub 2004/0099090, the examiner respectfully disagrees with the arguments. Element 30 of Hsu can be considered a first clutch gear, which is disposed with the other elements of the claim. A clutch is defined as merely a device that activates two working parts of a shaft or of a shaft and a driving mechanism.

Arguments regarding claims 24-28 have been considered, but are moot in view of the new ground(s) of rejection.

Applicant's arguments of rejection of claim 29 under 35 USC 102(b) as being anticipated by Chida USP 4,349,287 have been considered and are persuasive, but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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3. Claims 1 and 29 are rejected under 35 U.S.C. 102(a) as being anticipated by Hsu USPub 2004/0099090.

Hsu discloses a similar driving apparatus of a multi-function machine including:

- A scanner unit (¶0003)
- A document transport part (81)
- A printer unit (¶0003)
- A carrier including a print head with an ink jet nozzle mounted thereon (¶0004)

The driving apparatus comprising:

- A driving motor (10)
- A scanner driving part (61) (¶0018)
- A printer driving part (62) (¶0018)
- A power switching part disposed with the driving motor, the scanner driving part, and the printer driving part (fig.1)
- A first clutch (30)

Regarding claim 29, Hsu discloses a similar power switching apparatus comprising:

- A main clutch gear (32) movably disposed at a rotation axis and coupled to the driving source (10,102)
- First (61) and second (62) clutch gears rotatably disposed at the rotation axis
- A clutch spring (50)
- A compulsory power switching unit (20)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai JP 62016939 in view of Ishii USP 4,936,695.

Arai discloses a similar power transmitting apparatus comprising:

- A swing gear (46) disposed at a first frame (fig.2,3)
- A swing lever (48) formed of a V-shaped form and disposed coaxially with the swing gear (fig.7)
- A pair of idle gears (51,52) respectively disposed at both ends of the swing lever
- A body comprising a V-shaped form and comprising an axis hole formed at a center thereof to receive a support axis of the swing gear (fig.7)
- Engaging projections formed at both ends of the body (fig.7)

Arai does not expressly disclose elastic members disposed between the idle gears and the swing lever.

Ishii teaches an elastic member disposed between the idle gear (36) and swing lever (38) (C4/L47-63) for the purpose of dampening vibration between the two.

At the time of invention it would have been obvious to one having ordinary skill in the art to employ an elastic member disposed between the idle gear and swing lever, as

taught by Ishii, in the device of Arai, for the purpose of dampening vibration between the two.

6. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai JP 62016939 in view of Hoshino USP 4,700,437.

Arai discloses all the limitations of the claim (see ¶5), but does not expressly disclose each of the engaging projections comprising a cutting portion formed to be cut in a given width at a center of the engaging projection or an anti-escaping jaw disposed at an upper portion of the engaging projection and having a top end rounded off in a direction that a corresponding one of the idle gears is inserted and an angled bottom end.

Hoshino teaches each of the engaging projections (40) comprising a cutting portion (42) formed to be cut in a given width at a center of the engaging projection and an anti-escaping jaw disposed at an upper portion of the engaging projection and having a top end rounded off in a direction that a corresponding one of the objects is inserted and an angled bottom end (fig.2) for the purpose of adjusting the height of the object relative to the base (C5/L37-62).

At the time of invention it would have been obvious to one having ordinary skill in the art to have each of the engaging projections comprise a cutting portion formed to be cut in a given width at a center of the engaging projection and an anti-escaping jaw disposed at an upper portion of the engaging projection and having a top end rounded off in a direction that a corresponding one of the objects is inserted and an angled

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bottom end, as taught by Hoshino, in the device of Arai, for the purpose of adjusting the height of the object relative to the base.

7. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai JP 62016939 in view of Ishii USP 4,936,695 further in view of Hoshino USP 4,643,069.

Arai discloses all the limitations of the claim (see ¶15) but does not expressly disclose each of the elastic members formed of a leaf spring supported around each corresponding engaging projection.

Borisoff teaches each of the elastic members formed of a leaf spring (51) supported around each corresponding engaging projection (fig.3) for the purpose of biasing the gear away from the swing lever (C2/L64-66).

At the time of invention it would have been obvious to one having ordinary skill in the art to have each of the elastic members formed of a leaf spring supported around each corresponding engaging projection, as taught by Borisoff, in the device of Arai, for the purpose of biasing the gear away from the swing lever.

Allowable Subject Matter

8. Claims 2,3,4,5,22 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not appear to disclose the combination of elements recited in the claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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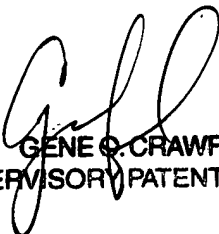
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie A. Nicholson III whose telephone number is 571-272-5487. The examiner can normally be reached on M-F, 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on 571-272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

L.N.
2/28/2006


GENE Q. CRAWFORD
SUPERVISORY PATENT EXAMINER